

Listing of the Claims

1. (previously presented) A method for maintaining a virtual presence of a first remote telephone user in a PBX system having a frame relay network connection between two endpoint routers while permitting the first remote user to make local calls, the method comprising:
 - generating an off-hook indicator and transmitting the indicator to the PBX;
 - routing a telephone call placed at a remote telephone in accordance with a defined protocol other than via the PBX while the off-hook indicator is active and the user is still connected to the PBX;
 - detecting when the routed telephone call is terminated; and
 - removing the off-hook indicator from the PBX upon detection of termination.
2. (previously presented) The method of claim 1, wherein transmitting and removing are performed by in-band signaling.
3. (previously presented) The method of claim 2, wherein said in-band signaling is in accordance with a Voice over Frame Relay or Voice over ATM, ATM Adaptation Layer 2 voice over packet protocol.
4. (original) The method of claim 1, wherein said telephone call-routing is to a public switched telephone network (PSTN) local to the remote telephone.
5. (original) The method of claim 1, wherein said telephone call-routing is to another remote telephone user at the same site within the PBX system as the first remote telephone user.
6. (previously presented) The method of claim 4, wherein said call-routing to another remote same-site telephone user is performed by a router having the public switched telephone network (PSTN) local to the remote telephone and wherein said PSTN is used in said call-routing.

7. (previously presented) The method of claim 1 in which the frame relay network includes an Voice over Frame Relay or Voice over ATM, ATM Adaptation Layer 2 voice over packet trunk connection.
8. (previously presented) The method of claim 1 which further comprises:
forwarding an incoming call directed to the remote telephone to a voice mailbox generally from a time when said transmitting occurs to a time when said removing occurs.
9. (previously presented) The method of claim 1 which further comprises:
indicating in response to an incoming call directed to the remote telephone that the telephone is busy generally from when said off-hook indicator is transmitted to when said off-hook indicator is removed.
10. (previously presented) Private branch exchange (PBX) conditioning apparatus for use in an endpoint router having a local public switched telephone network (PSTN) connection and a voice-equipped frame relay network connection, the apparatus comprising:
a mechanism for transmitting an off-hook indicator to the PBX that the PBX-connected telephone is temporarily incapable of receiving calls;
a mechanism for selectively routing a telephone call placed at a PBX-connected telephone to the local PSTN other than via the PBX while the off-hook indicator is active and the user is still connected to the PBX;
a mechanism for detecting a termination of such a PSTN-routed telephone call; and
a mechanism responsive to said detecting mechanism for signaling the PBX to remove the off-hook indicator and that the PBX-connected telephone again is capable of receiving calls;
said transmitting and signaling mechanisms including software instructions resident on a computer-readable medium that when executed by a processor modify one or more interface status bits in the PBX.

11. (original) The apparatus of claim 10, wherein said routing mechanism is responsive to a predefined dialing sequence received from the PBX-connected telephone.
12. (original) The apparatus of claim 10 which further comprises a mechanism for alternatively routing the telephone call placed at the PBX-connected telephone to a same site PBX-connected telephone.
13. (previously presented) The apparatus of claim 10, wherein said transmitting and signaling mechanisms are operatively coupled to a PBX station interface associated with the PBX.
14. (previously presented) Private branch exchange (PBX) conditioning apparatus for use in an endpoint router having a local public switched telephone network (PSTN) connection and a voice-equipped frame relay network connection, the apparatus comprising:
- means for transmitting an off-hook indicator to the PBX that the PBX-connected telephone is temporarily incapable of receiving calls;
 - means for selectively routing a telephone call placed at a PBX-connected telephone to the local PSTN other than via the PBX while the off-hook indicator is active and the user is still connected to the PBX;
 - means for detecting a termination of such a PSTN-routed telephone call; and
 - means responsive to said detecting means for signaling the PBX to remove the off-hook indicator and that the PBX-connected telephone again is capable of receiving calls.
15. (original) The apparatus of claim 14, wherein said routing means is responsive to a predefined dialing sequence received from the PBX-connected telephone.
16. (original) The apparatus of claim 14 which further comprises means for alternatively routing the telephone call placed at the PBX-connected telephone to a same site PBX-connected telephone.

17. (previously presented) The apparatus of claim 14, wherein a first and a second signaling means are operatively coupled to a PBX station interface associated with the PBX.

18. (previously presented) A computer-readable medium containing a program for maintaining a virtual presence of a first remote telephone user in a PBX system having a frame relay network connection between two endpoint routers while permitting the first remote user to make local calls, the program comprising:

instructions for first signaling an off-hook indicator to the PBX to represent a remote telephone as being off hook;

instructions for routing a telephone call placed at the remote telephone in accordance with a defined protocol other than via the PBX while the off-hook indicator is active and the user is still connected to the PBX;

instructions for detecting when the routed telephone call is terminated; and

instructions for second signaling the PBX to remove the off-hook indicator and to restore the on-hook status of the remote telephone.

19. (previously presented) The computer-readable medium in accordance with claim 18, wherein said instructions for first and second signaling are operative to perform in-band signaling in accordance with Voice over Frame Relay or Voice over ATM, ATM Adaptation Layer 2 voice over packet protocol.

20. (original) The computer-readable medium in accordance with claim 18, wherein said call-routing instructions are operative to route the telephone call to a public switched telephone network (PSTN) local to the remote telephone.

21. (original) The computer-readable medium in accordance with claim 18, wherein said call-routing instructions are operative to route the telephone call to another remote telephone user at the same site within the PBX system as the first remote telephone user.